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**From:** EPAResearchCompass [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=C1E8F11508674C3C954553A1129D33E5-EPARESEARCH]  
**Sent:** 6/11/2019 6:42:21 PM  
**To:** ORD-ALL Feds and NonFeds and RSLs [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=2c735272eef941588aefd9a05ed28823-ORD-ALL Feds and NonFeds and RSLs]  
**CC:** MaGowan, Maricruz [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=8c4c1646850c47f6bdfb869db47c467c-MMagow02]; Harris-Young, Dawn [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=1352e37302cf4eb78a64c69a108b46e5-Young, Dawn]; Barnett, Felicia [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=5773b45cae5142fe950861dd6146f1e9-Barnett, Felicia]; Carter, Bobbi [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=f16dcafe85fc418ebd1651be2e8ab82d-Carter, Bobbi]; Gettle, Jeaneanne [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=d8e72aa7e1894faea44006fd9f22b637-Gettle, Jeaneanne]; Taylor, Dawn [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=b984d00ec06544e498ee5d986f97047c-Taylor, Dawn]; Klinger, Adam [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=346d5466632f4967adc7169c8d2ce4fd-Klinger, Adam]; Liljegren, Jennifer [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=c7098a838cd34f75b8878571fe95d939-JLiljegr]; Pollard, Solomon [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=16cdf700f8024145847a2770b84abae3-Pollard, Solomon]; Clarage, Meredith [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=ee9504437be545489f518710a5e80e68-Clarage, Meredith]; Crk, Tanja [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=fccf9b9519484e8f88e90d3573253817-Tanja Crk]  
**Subject:** Weekly Compass: June 11, 2019



Weekly Update: 6/11/2019

Welcome to the Weekly Compass, your gateway to information about recent and upcoming ORD activities. If you have ideas for the Weekly Compass, please send them to the [editors](#). To see past issues, visit [the archive](#) on ORD@work.

## Weekly Note from Jennifer

ORDers—

This week, ORD is holding an internal Lead Modeling Workshop in RTP. The goals of the workshop are to reach a common understanding of the various lead models that are available for use and to develop a strategy for evaluating aggregate exposures to lead. Thanks to all the workshop organizers and participants – I look forward to hearing about the results.

I hope to see you all at the town hall tomorrow. We'll be discussing ORD's strategic measure, budget and hiring updates, the Employee Viewpoint Survey, and the proposed reorganization.

Speaking of the reorg, our current focus is identifying where managers and staff will be placed within the new organization. While we won't be sharing staffing assignments with you at the Town Hall, we will update you on when we think we'll be able to do that.

Thanks to everyone who has taken the Employee Viewpoint Survey. As of this morning, 34% of ORD has taken the survey. We really appreciate hearing from you. We want to make sure we hear from everyone so please take some time to share your responses with us.

Finally, I'd like to congratulate NRMRL's Dr. Rebecca Dodder for receiving a prestigious Arthur S. Flemming Award. Dr. Dodder is a much sought-after expert within and outside of EPA. She has dedicated her time and considerable creativity to sharing her work and serving as EPA ambassador for clean air research to students and local communities. Thanks for all your hard work, Rebecca.

Hope to "see" everyone tomorrow at the Town Hall!

--Jennifer

### Quick Updates

- Don't forget to [check out the open opportunities on Talent Hub!](#)
- You can read the [This Week @ EPA newsletter here](#).
- ORD is reorganizing for the first time in 25 years to better address the increasingly complex environmental challenges of the 21st century. [Learn more about the reorg.](#)
- Upcoming Webinars
  - 6/12 [EPA Tools and Resources Webinar: EPA's Report on the Environment](#)
  - 6/25 [Small Water Systems Research Webinar: Sanitary Surveys](#)

## Photos of the Week: ORD Scientists Demo Tools and Take Tours

## In the Lab:

### New Hampshire DES PFAS Report

Last week, NERL sent the fifth in a series of reports on its ongoing technical support to New Hampshire Department of Environmental Services (NHDES). NHDES has concerns over per- and polyfluorinated alkyl substance (PFAS) environmental contamination associated with manufacturing sites. This most recent report from NERL provides non-targeted analysis results of environmental samples collected near manufacturing facilities. It tentatively identifies various PFAS found in industrial dispersions and surfactants, which are used to help make products stain-resistant, waterproof, or nonstick. These results are of interest to NHDES in their evaluation of potential air emissions. EPA continues to develop analytical methods for many PFAS compounds in various media including some of those included in this report. NERL is providing the results of the Lab's analyses as they become available.

### National Science and Technology Council Conference

This week, ORD managers and staff will participate in a conference sponsored by the National Science and Technology Council (NSTC). The conference is federal wide with the theme of "Building Bridges Across the S&T Enterprise." ORD will participate in the session, "Measuring, Understanding, and Communicating ROI for R&D" as part of a panel discussing strategies for measuring success. ORD will also provide an overview of the CompTox Chemicals Dashboard as an open source research resource, and present on an Impact and Metric project which is aimed at tracking traditional and alternative metrics on research products. The NSTC is a cabinet-level council with the primary objective of establishing clear national goals for Federal science and technology investments.

### ORD Internal Lead Modeling Workshop

This week, ORD is holding an Internal Lead (Pb) Modeling Workshop at the EPA-RTP campus. The goals of the workshop are to reach a common understanding of the various Pb models that are available and to develop a strategy for evaluating aggregate exposures to Pb. The outcome of the workshop will also strengthen ORD's capabilities to contribute to the Federal Pb Action Plan goal of enhancing and applying data and tools and determining the key drivers of blood lead levels from multimedia exposures to inform lead regulatory decisions and site assessments.

### SBIR Kick-Off Meeting

Last week, NCER's SBIR team held the 2019 Kick-off Meeting for small businesses that recently received Phase I contracts with the SBIR Program. Twenty-three companies from across the U.S. gathered in the Map Room at EPA headquarters for an all-day event lead by SBIR Program Manager, April Richards. Opening and welcoming remarks were given by Jennifer Orme-Zavaleta. Throughout the day, the companies gave pitches on their environmental technologies, heard from an expert panel, and made valuable networking connections. As a part of the award, they were provided individual meetings

with commercialization professionals, where they received personalized insight and advice on their projects as well as a chance to meet with their EPA Project Officer.

### **P3 Student Design Expo**

Next week, NCER's P3 team, Angela Page, April Richards, Paige Brown and Jacquelyn Bell, are convening the P3 Student Design Expo at the TechConnect Expo in Boston, MA. This is an opportunity for P3 student teams to showcase their projects to a wide audience including EPA representatives, companies and other students. They are hosting an EPA booth, running meetings, and assisting the students presenting at the expo. In addition, EPA P3 is hosting a panel as part of the TechConnect program featuring P3 Phase II teams providing big picture highlights from their successful projects. EPA leadership is providing opening remarks and a Program Officer from VentureWell is providing inspirational guidance for next steps for the student teams to continue the impact of their projects.

### **Web Summit – Clean Air Spaces**

ORD is hosting a web summit on Wednesday and Thursday (11:30-4:00, ET each day) to share information on what we know about the effectiveness of air filtration methods to improve indoor air quality during wildland fire episodes. The summit consists of four topic-based sessions: Setting the Stage, Insights from Public Health Agencies, and State of Technology to Improve Air During High Outdoor Pollution Concentrations Part I and II. The summit agenda, presenter details, and registration information is available on the ORD Research Events page.

### **2019 PFAS National Conference**

This week, the 2019 Per- and Polyfluoroalkyl Substances: Second National Conference will be held in Boston, Massachusetts. The conference was organized in response to the "significant growth in the number of contaminated sites, public awareness, community organizing, public policy, advisories and regulation, scientific research, and media attention" concerning PFAS.

### **Idaho National Laboratory Representatives Meet with NHSRC about Water Security Test Bed**

Last week, representatives from Idaho National Laboratory (INL), Energy and Environmental Science and Technology, visited NHSRC in Cincinnati to discuss the future directions of the Water Security Test Bed (WSTB) and potential collaboration at the EPA's Test and Evaluation (T&E) Facility. The WSTB discussions focused on determining the next steps in support of the draft Implementation plan, specifically how to leverage additional partners in order to expand WSTB's capabilities. Tentatively, the first focus area will be cyber security research based on interest within INL and partners who have reached out to EPA. INL also toured the T&E facility and are interested in future collaboration. Currently they are submitting a DOE proposal to develop a Desalination Research & Innovation Consortium (DRINC) to expand our nation's water supply by creating breakthrough technologies from early stage R&D that deliver water at pipe parity with conventional water supplies. INL envisions potentially using the T&E facility and the WSTB to support this effort.

### **ORD Scientist Providing Technical Support for Pathogen Detection in Drinking Water in Nepal**

ORD NHSRC's Dr. Sanjiv Shah is providing technical support and guidance to scientists from Stanford University for sampling, sample processing, and analysis to detect *Salmonella Typhi* and *Salmonella Paratyphi* A pathogens in drinking water in Nepal. *S. Typhi* and *S. Paratyphi* A bacteria cause typhoid fever and paratyphoid fever, respectively, and they can be lethal if the patients are not diagnosed and treated in a timely manner. Typhoid fever continues to cause considerable morbidity and mortality in Nepal. Dr. Shah shared EPA-ORD-NHSRC's Rapid Viability PCR method for detection of these pathogens in water samples containing a high number of other intestinal bacteria that interfere with the traditional microbiological culture methods-based sample analysis.

### Launching Soon: Using Citizen Science To Analyze Underwater Video in the Great Lakes

This month, a new web application will launch on the Zooniverse platform to allow citizen scientists to analyze underwater video to help determine the presence of invasive species in the Great Lakes. This pilot project intends to increase the efficiency and timeliness of underwater video analysis at a fraction of the cost of expert analysis by allowing multiple reviews of each video and consensus-based analysis. This first EPA project using the Zooniverse platform will allow citizens to review video for the presence of invasive species such as round goby and zebra/quagga mussels. Small vessels, the Great Lakes National Program Office's (GLNPO) *Lake Guardian II*, and ORD's *Lake Explorer II* collected underwater video in Lake Huron, Lake Ontario, and the Niagara River through the Great Lakes National Program Office's Coordinated Science and Monitoring Initiative and the National Aquatic Resource Survey National Coastal Condition Assessment. The new [Deep Lake Explorer application](#) went through extensive beta-testing in 2017 and 2018. This project, funded by an ORD Regional State Innovation Grant, is a partnership among Region 5, Region 2, the Office of Water, GLNPO, the EPA Office of Web Communications, and ORD, and was developed with stakeholder involvement from Illinois, Indiana, Michigan, Minnesota, New York, Ohio, Pennsylvania, and Wisconsin.

### EPA Tools and Resources Webinar: ROE

Tomorrow, ORD will host its monthly *EPA Tools and Resources webinar* on EPA's Report on the Environment (ROE). EPA has developed ROE to be a comprehensive source of the best available indicators on trends in the environment and human health. It provides the most reliable indicators currently available that describe the current status and historical trends in air, water, land, human health and exposure, and ecological conditions at the national and, where possible, regional levels. Scot Hagerthey (NCEA) will present this overview of the ROE. Additional information and registration is available [here](#).

### Publication: Read-Across Applications

[Exploring current read-across applications and needs among selected U.S. Federal Agencies](#), a manuscript co-authored by Lucina Lizarraga and other ORD colleagues has been published. The manuscript highlights a case study on the PPRTV assessment for n-heptanal. It also maps the available guidance and tools as well as current read across use in the agencies.

### Publication: A Technique for Detecting Some Types of PFAS

Environmental Science and Technology Letters recently published the article [Gas-Phase Detection of Fluorotelomer Alcohols and Other Oxygenated Per- and Polyfluoroalkyl](#)

Substances by Chemical Ionization Mass Spectrometry by NERL's Theran Riedel, Mark Strynar, Andrew Lindstrom and John Offenbergl, and NHEERL's Johnsie Lang (ORISE). The article shows a useful technique for detecting certain types of PFAS. This technique allows for fast measurements with less sample preparation than is needed by other PFAS methods.

#### Journal article: Flame Retardants

NRMRL's Xiaoyu Liu and ORISE participant Yirui Lang's paper, "The influence of temperature on the emissions of organophosphate ester flame retardants from polyisocyanurate foam: Measurement and modeling," has been published in *Chemosphere*. Emissions of organophosphate ester flame retardants from foam were measured. Results shed light on the effect of temperature on the mechanisms governing emissions of SVOCs. The results from this paper will be used by OPPT to refine and improve their Indoor Environmental Concentrations in Buildings with Conditioned and Unconditioned Zones (IECCU) model. This work was conducted under the AE program.

#### Grantee Publication: Adverse Impacts from Exposures to Endocrine Disrupting Compounds

STAR Fellow, Lariah Edwards, has co-authored a publication in Environmental Health. Ms. Edwards was awarded funds for research related to "Adverse Impacts from Exposures to Endocrine Disrupting Compounds." Read the publication: Assessment of total, ligand-induced peroxisome proliferator activated receptor  $\gamma$  ligand activity in serum

#### Grantee Publication: Maternal Health

STAR grantees from the EPA/NIEHS Children's Center at Duke University published research results in *Brain, Behavior, and Immunity* indicating that dysregulation in gestational immune activity was associated with child cognitive ability and executive functioning. Read the publication: Associations between maternal cytokine levels during gestation and measures of child cognitive abilities and executive functioning

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## In the Office:

### Mandatory Training Courses

In January, EPA launched its new learning management system, FedTalent. This is a reminder that employees have five mandatory training courses which must be completed by the end of the fiscal year (9/30/19). ORD has an internal due date of 8/31/19 for completion of the Information Security Privacy and Awareness Training. All EPA mandatory training courses are accessible through EPA's eLearning website (<https://intranet.epa.gov/oarm/fedtalent/elearning.html>). Most courses have been loaded and are active. However, the FY19 Records Management Training will be released very soon (in the fourth quarter of the FY).

### Employee Viewpoint Survey

Please take 15 minutes out of your day and let leadership hear from you by participating in the Employee Viewpoint Survey. Employees should look for a survey link from the "Federal Employee Viewpoint Survey-EP <EVEP@opm.gov>" with the subject: "The

2019 OPM FEVS: Empowering Employees. Inspiring Change.” The survey will be open through June 27, 2019. The ORD response rate is 33.4%.

#### **EPA’s National Honor Awards Ceremony**

The EPA’s National Honor Awards Ceremony will be held July 10 from 2:00 p.m. to 4:00 p.m. in the Atrium Hall of the Ronald Reagan and International Trade Building in Washington, DC. A reception for award recipients will be held in the Atrium of the Ronald Reagan and International Trade Building immediately following the ceremony.

#### **FTTA Market Assessment and Business Plan Project**

This summer the FTTA staff are working with the University of Denver Daniels College of Business on a project that allows students to investigate an EPA-patented technology and develop a market assessment and business plan. Students will work with FTTA staff and the NHEERL inventor to better understand the technology and gain insight into information that is valuable to EPA in marketing the technology to companies for licensing. Students will benefit from working with EPA staff and a real-world technology challenge, and EPA will benefit from their market research.

#### **New Human Resources (HR) Policy on Unpaid Services from Non-students**

Last month, the Office of Mission Support issued [HR Bulletin 19-003B](#), the Acceptance and Use of Unpaid Services. This HR Bulletin establishes the Agency’s policy on the acceptance and use of any unpaid services from non-students. [EPA Form 3100-14](#), Volunteer Service Program Participation Agreement, was also updated. This form is required for non-student and student volunteers. OARS/HRD will issue an ORD Transmittal to provide additional information on this new HR Bulletin.

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### **Accolades:**

#### **OW Appreciation**

Last month, NCEA’s Paul Schlosser and Dustin Kapraun were recognized at an OW hosted celebration of a recent proposal regarding a drinking water proposed drinking water standard for their excellent work on a biologically-based dose response model.

#### **Lifetime Achievement in Wetlands Research**

NHEERL’s Mary Kentula has been recognized with a Lifetime Achievement Award from the Society of Wetlands Scientists. Mary’s career most recently includes significant contributions to the National Wetlands Condition Assessment, one of the National Aquatic Resource Survey reports that ORD prepares jointly with the Office of Water. Her nomination letter states that Mary’s work ‘has inspired the development of major research areas to improve the outcomes of wetland restoration, and to implement large-scale wetland assessment needed to fully protect wetlands in the U.S. and internationally. And her work and mentorship have inspired an entire generation of scientists.’

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### **In the Community:**

## USC WISE Program.

Today, NCEA will host students participating in the University of South Carolina (USC) Washington Internship for Students of Engineering (WISE) program to speak with them about careers in environmental science.

## EPA-RTP STEM Outreach Program

This week, EPA-RTP's Community Engagement and STEM Education Program will host approximately 25 high school students for its 9<sup>th</sup> annual 35-hour workshop, *Protecting Human Health in a Changing Environment*. Over 50 EPA employees will participate in the workshop, which includes hands-on experiences, tours of campus facilities, tours of National Institute of Environmental Health Sciences (NIEHS) facilities, networking with EPA professionals, and career explorations. During the program, student participants will be exposed to the many EPA careers available in science, technology, engineering and math (STEM) as well as other fields such as administration, policy, and communications. Participants will hear directly from our scientists and engineers about their cutting-edge research that serves to support EPA's mission of protecting human health and the environment. EducationNC (EdNC) has included a story about the event, Triangle area high schoolers start off summer at EPA science workshop, on their site.

On Thursday, the Program will host 20 students, grades 7 through 9, from the North Carolina School of Science and Math Summer STEM Camp focused on epidemiology. These students will spend an afternoon on the EPA-RTP campus for building tours, hands-on STEM activities, and speed mentoring.

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## Photos of the Week: ORD Scientists Demo Tools and Take Tours

NHSRC scientists attended an APhL meeting last week. Kathy Hall and Stuart Willison demo'd ESAM, and Tim Boe demo'd his sampling Trade-Off Tool (TOTS).







*Kathy Hall and Stuart Willison demo'ed ESAM.*



*Tim Boe demonstrating his sampling Trade-Off Tool (TOTS)*

Last month, NCCT's Rusty Thomas and NHEERL's Wayne Cascio met with Dale Hoff, Director of NHEERL Mid-Continent Ecology Division in Duluth, to take a tour of the Lake Guardian. See below for pictures from their tour.



*Rusty Thomas and NHEERL's Dave Bolgrien*



*Dale Hoff, Rusty Thomas, and Wayne Cascio stand in front of the Lake Explorer II.*